

Exploration of Effect of Hospital Participation in Diabetes Mellitus Disease Carecertification on Care of Patients with Diabetes

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INTRODUCTION

- This paper explores the participation of a hospital in the Southern Taiwan in Diabetes Mellitus Disease Care certification and its effect on the care of patients with Diabetes.
- Throughout the certification process, in which the Diabetes team strengthened the operation process(standard operating procedure) and engaged in quality improvement activities, the Diabetes Mellitus hospital quality performance measurement index(DQIP) were employed to monitor the effectiveness of care for patients with Diabetes.

METHOD

- This study was conducted on patients with Diabetes Mellitus at a leading teaching hospital in Chiayi, Taiwan.
- Through team consensus, a set of operational guidelines was formulated, which included assisting physicians in obtaining qualifications for the Diabetes Shared Care Network, implementing automatic information system reminders, increasing telephone follow-ups and health education, and adjusting outpatient clinic procedures.
- Data collection proceeded from January 2021 to December 2022. The control and intervention groups comprised 58971, 59874 individuals, respectively.

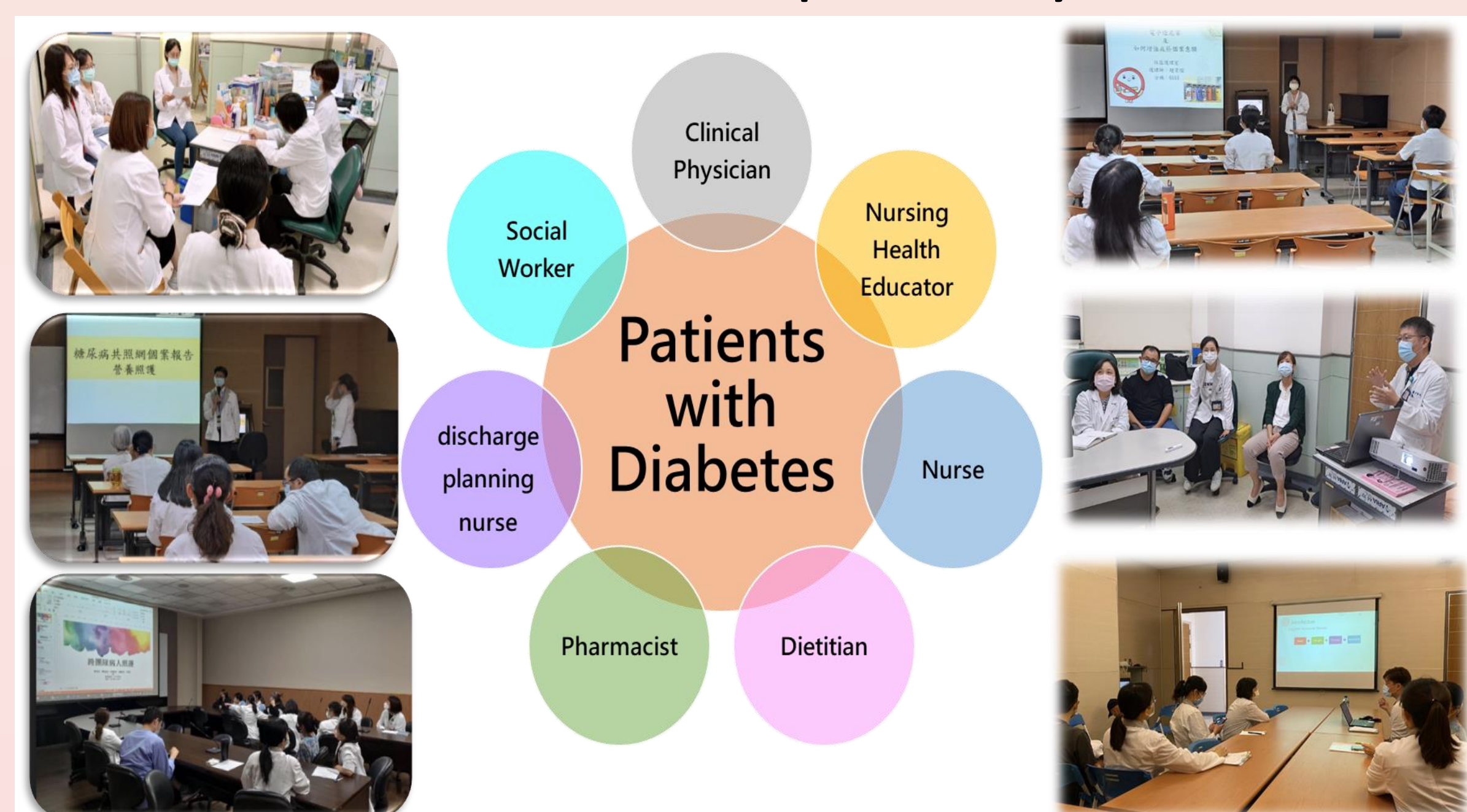


Fig. team consensus

KEYWORD

Care Outcome;
Diabetes Mellitus Disease Care Certification;
Hospital Quality Performance Measurement Index

RESULTS

- A comparison of the DQIP before and after the certification indicated that the following indicators have been significantly improved: the rate of patients microalbuminuria($p < .001$), foot ($p < .001$), eye ($p < .001$) and related blood test include: LDL, Total cholesterol, Triglyceride($p < .001$) in the past 12 months, percentage of diabetic patients who had 2 monitoring HbA1c records in the past 12 months($p < .001$), rate of screening completed from at high risk patients of diabetes($p = .001$), diabetes patient and pre-diabetes patient education of self-management has increased($p < .001$, $p = .001$).

Table The DQIP before and after the certification analysis

Variable	Control groups	Intervention groups	P value
	Mean (SD)	Mean (SD)	
Microalbuminuria	63.99 (1.89)	70.74 (2.47)	.000
Foot examination	77.47 (1.40)	85.61 (1.77)	.000
Eye examination	65.55 (1.70)	72.02 (2.15)	.000
Related blood test include: LDL, Total cholesterol, Triglyceride	59.56 (1.52)	89.25 (0.48)	.000
HbA1c	88.67 (0.56)	89.57 (0.44)	.000
Screening completed from at high risk patients of diabetes	22.34 (2.91)	36.47 (10.72)	.001
Receiving ACE inhibitors and ARBs medication	74.19 (1.75)	74.66 (1.23)	.451
Diabetes patient education of self-management	52.07 (1.21)	65.00 (2.98)	.000
Pre-diabetes patient education of self-management	0.00 (0.00)	10.28 (7.63)	.001

FINDINGS AND DISCUSSION

- The participation in the certification process, team resource integration, and process improvements increased the effectiveness of the care of patients with Diabetes Mellitus.

REFERENCES

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